

AMENDMENTS TO THE CLAIMS

Claims 1-27 (Canceled)

Claim 28 (Currently Amended): A method for processing data concerning a business transaction in a computer system, the computer system having at least one processing unit, at least one storage unit, input means and output means and data communication means which couple the input and output means and the units of the computer system to one another, the data specifying a type of the business transaction, a time of the business transaction and values of the business transaction, the values indicating changes in account values of at least two predetermined accounts of a plurality of accounts, comprising:

providing at least one ledger structure, the ledger structure having a storage ~~store~~ structure for ordered storage of a plurality of book data sets, each book data set being associated with a business transaction, the business transaction comprising data, the data concerning a business transaction including its type, time and values of the business transaction which are associated with this time and indicate changes, and associated with each business transaction are predetermined accounts in which the values of the business transaction should effect corresponding changes in account values,

each book data set having associated with it a record identifier which unambiguously characterizes the ledger structure and the book data set within in ~~in~~ the ledger structure, and each book data set ~~comprising~~ containing an account identifier,

the account identifier identifying at least two selected accounts of the plurality of accounts, which depend upon the type of business transaction, one of the at least two selected accounts being a book account with which the ledger structure is associated, and the further of the at least two selected accounts being cross-accounts associated with the book account;

forming an account object for each account of the plurality of accounts, each account object having an identifier data structure and a ~~store~~storage structure for ordered storage of partial entry data sets, each partial entry data set of the ~~store~~storage structure containing the record identifier of a book data set associated with ~~it~~the partial entry data set as well as at least one value of a business transaction which ~~should effects~~ a corresponding change of account values of the account object;

recording of the data concerning the business transaction with a computer system having at least one processing unit, at least one storage unit, input means and output means and data communication means which couple the input and output means and the units of the computer system to one another, the recording including:

(a) selecting one of the at least one ledger structures, depending on the type of the business transaction, selecting an account object of a book account with which the selected ledger structure is associated, and at least one account object of a cross-account of the book account as a function of the type of the business transaction, the book account being an account with which the selected ledger structure is associated, and reading in of the data concerning the business transaction;

(b) generating a book data set and at least two partial entry data sets from the read-in data read-in in step (c), the book data set for storing in the storage structure of the ledger structure selected in step (a), one partial entry data set for storing in the storage structure of the account object selected in step (b), and at least one partial entry data set for storing in the storage structure of the at least one account object selected in step (b), the partial entry data sets containing the values of the business transaction which contemporaneously effect corresponding changes of account values of the selected account objects;and

(c) storing the book data set in order in the storage structure of the selected ledger structure selected in step (a);

(~~[[e]]~~d) sending each partial entry data set of the at least two partial entry data sets to the its corresponding account objects object selected in step (a), of the book account and of the cross-account or the cross-accounts, the partial entry sets containing the values of the business transaction which should contemporaneously effect corresponding changes of account values; and

(~~[[d]]~~e) receiving the partial entry data sets in the account objects and storing the partial entry data sets in order in the corresponding storage structures of the account objects; and
reporting the data concerning the business transactions.

Claim 29 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 28,

wherein the account objects each have at least one collective ~~store~~storage structure,

wherein each collective ~~store~~storage structure comprises a plurality of data storage fields, each data storage field being associated with a time interval having a start time and an end time within a calendar year and storing a sum value,

wherein the start and end times of a first number of data storage fields are chosen so that the time intervals each correspond to a calendar month,

wherein each sum value is produced from a start value and addends, the addends being in each case a predetermined function of the values of a business transaction of which the time falls within the time interval and with which the account of the account object is associated, and

wherein in step ([d]) the collective ~~store~~storage structures are updated by adding up the addends formed from the values of the business transaction contained in the partial entry data sets in the data storage fields corresponding to the time of the business transaction.

Claim 30 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 29, wherein

the collective ~~store~~storage structures have a second number of data storage fields in which the start and end times are chosen so that the time intervals in each case correspond to a calendar day, and

wherein not only the time intervals of the first number of data storage fields which each correspond to a calendar month but also the time intervals of the second number of data storage fields which each correspond to a calendar day completely cover the time interval of a calendar year once.

Claim 31 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 30, wherein the plurality of data storage fields comprises at least one data storage field of which the time interval corresponds to the entire calendar year.

Claim 32 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 29, wherein the start values of the data storage fields can preferably be set (i) to equal zero, (ii) to a sum value of a data storage field of a data storage field of another collective ~~store~~storage structure of the account object.

Claim 33 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 29, wherein the predetermined function according to which the addends are calculated from the values of the business transaction comprises:

- (i) setting of the addend to equal to a value of the business transaction so that the sum value corresponds to a balance,
- (ii) setting of the addend to equal to a value of the business transaction so long as this is greater than zero; otherwise setting of the addend to equal to zero so that the sum value corresponds to a credit balance,
- (iii) setting of the addend to equal to a value of the business transaction so long as this is less than zero; otherwise setting of the addend to zero so that the sum value corresponds to a debit balance,
- (iv) multiplication of a value of the business transaction by a constant factor, or
- (v) multiplication of a value of the business transaction by a variable factor held a data storage field of a further collective ~~store~~storage structure which corresponds in the time interval.

Claim 34 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 28, wherein the ~~store~~storage structure for ordered storage of the book data set of the ledger structure and the ~~store~~storage structures for ordered storage of the partial entry data sets of the account objects are preferably sorted or respectively indexed lists or tables which are sorted or indexed according to the serial number of the entry of the data sets or according to the time of the business transaction.

Claim 35 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 28, wherein the identifier data structure has a character string and/or number which unambiguously denotes the account object.

Claim 36 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 28, wherein the identifier data structures of the account objects of the book accounts each contain an indication of the cross-accounts which can be associated with them, wherein in step (a) the at least one account object of a cross-account is selected as a function of the indication of the cross-accounts which can be associated with the book account.

Claim 37 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 36, wherein the identifier data structures of the account objects of the cross-accounts each contain an indication of those accounts with which they can be associated as cross-accounts, wherein in step (a) the at least one account object of a cross-account is selected as a function of its display of those accounts with which it can be associated as cross-account.

Claim 38 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 29, wherein

analysis diagrams are provided which have positions with position values, wherein changes of account values effect changes of predetermined position values,

wherein for at least one selected position of an analysis diagram an analysis object is formed which has an identifier data structure and at least one collective ~~store~~ storage structure,

wherein the makeup of the collective ~~store~~ storage structure of the analysis object corresponds to the makeup of the collective ~~store~~ storage structure of an account object,

wherein in the collective ~~store~~ storage structure of the analysis object the addends are a predetermined function of those changes of account values which are effected on the basis of business transactions of which the time falls within the time interval,

wherein in the recording of the data of a business transaction and the reporting of data concerning the business transaction the following further steps are carried out:

(~~[[e]]~~f) generation of at least one update data set, which is determined for a selected position of an analysis diagram from the values of the business transaction contained in a partial entry data set, in at least one account object of those account objects which have received a partial entry data set, and sending of the update data set to at least one analysis object associated with the account object; and

(~~[[f]]~~g) reception of the update data set in the at least one associated analysis object and updating of the collective ~~store~~storage structure of the analysis object by adding up the addends formed from the values contained in the update data set in the data storage fields correspondin^g to the time of the appertaining business transaction.

Claim 39 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ was claimed in Claim 38, wherein for the partial entry data sets and the update data sets a standard format is used and that messages of a standard format are generated for sending the partial entry data sets and the update data sets to the account objects or analysis objects.

Claim 40 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 38 ~~or 39~~, wherein the identifier data structure of the account object generatin^g the update data set preferably has a list of analysis object identifiers of the associated analysis objects.

Claim 41 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 38, wherein

the analysis diagrams have positions of a lowest level with which predetermined collective ~~store~~storage structures of predetermined account objects are associated,

wherein as a function of an output command indicating an analysis time a financial year a graphic output of an analysis diagram is generated via an output means, and this graphic output

the total of the sum values of those data storage fields of the collective ~~store~~storage structure of the account object of which the time intervals cover the time period from the beginning of the financial year up to the analysis time is output at each position of the lowest level which is associated with account object,

the total of the sum values of those data storage fields of the collective ~~store~~storage structure of the respective analysis object of which the time intervals cover the time period from the beginning of the financial year up to the analysis time is output at the selected positions which are associated with analysis objects, and

at the remaining positions values are output which are calculated from the values of other positions.

Claim 42 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 41, wherein

input buffer stores in which the incoming values of the partial entry data sets or update data sets are buffered until the respective collective ~~store~~storage structure can be updated with the values are preferably associated with the collective ~~store~~storage structures of the account objects and analysis objects, and

during the graphic output of an analysis scheme an instruction is generated for the user if the input buffer store still contains values with which a time before the analysis time is associated.

Claim 43 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 41 or 42, wherein a balance sheet, a profit and loss calculation, a turnover statistic or another business management analysis for a company or a group is represented by the graphical output of an analysis scheme.

Claim 44 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 38, wherein

all account objects have a first collective ~~store~~storage structure of which the sum values correspond to an amount which relates to a first unit, ~~preferably to a national currency~~, and

wherein at least one account object has at least one second collective ~~store~~storage structures of which the sure values correspond to an amount which relates to a second unit, ~~for example to a foreign currency, a number of items, a mass or a volume.~~

Claim 45 (Currently Amended): The method of ~~recording and processing data concerning business transactions~~ as claimed in Claim 44, wherein all analysis objects have a first collective store structure of which the sum values correspond to an amount which relates to a first unit, ~~preferably to a national currency.~~

Claim 46 (Currently Amended): The method of ~~recording and processing data concerning business transactions~~ as claimed in Claim 28, wherein

the ledger structure and/or the account object of the book account are selected as a function of a user input, and

wherein the at least one account object of the at least one cross-account is selected as a function of the input of a part of the data concerning the business transaction which contains at least the type of business transaction.

Claim 47 (Currently Amended): The method of ~~recording and processing data concerning business transactions~~ as claimed in Claim 46, wherein the user input comprises a selection of a graphical tree structure displayed to the user on an output means.

Claim 48 (Currently Amended): The method of ~~recording and processing data concerning business transactions~~ as claimed in Claim 46, wherein a further cross-account is always offered to the user for selection when it is apparent that a total of predetermined values of the partial entry data sets of the already selected accounts created on the basis of the data concerning the business transaction is not equal to zero.

Claim 49 (Currently Amended): The method of ~~recording and processing data concerning business transactions~~ as claimed in Claim 28, wherein the data read in in step (a) are held in a buffer store in a pre-recording mode until

all appertaining account objects are selected,
the book data set and the partial entry data sets have been generated an
the partial- entry-data sets have been checked at least to establish that a total of
predetermined values of the partial entry data sets created on the basis of the data concerning the
business transaction is equal to zero.

Claim 50 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 38, wherein all the account objects and analysis objects each contain at least one actual collective ~~store~~storage structure for the current calendar year which store values resulting from business transactions actually concluded.

Claim 51 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 50, wherein all the account objects and analysis objects each contain at least one actual collective ~~store~~storage structure for one or more elapsed calendar years which store values resulting from business transactions actually concluded.

Claim 52 (Currently Amended): The method ~~of recording and processing data concerning business transactions~~ as claimed in Claim 50, wherein account objects and analysis objects selected for planning each have at least one plan level collective store structure for the current calendar year and one or more future calendar years which store values resulting from planned business transactions.

Claim 53 (Currently Amended): The method of ~~recording and processing data concerning business transactions~~ as claimed in Claim 52, wherein the account objects and analysis objects can each have at least one process level collective ~~store~~storage structure for the current calendar year and one or more future calendar years which store values which result from the values of the plan level collective ~~store~~storage structures and/or from values for uncompleted business transactions resulting from purchase, storage, production and/or sales agreements to be implemented in the respective calendar year.

Claim 54 (Currently Amended): The method of ~~recording and processing data concerning business transactions~~ as claimed in Claim 52, wherein the account objects and analysis objects in each case have at least one further collective ~~store~~storage structure for the current calendar year and a future calendar year which store values which relate to a liquidity resulting from the planned values and the actual values.